

MER Shift Reports

STS-107

Day 13 Shift 1

STS-107

OMS/RCS Day 13 Shift 2 Report

INITIATOR: Garza
DATE: January 28, 2003

MET: 12/02:38
GMT: 028/18:17
CENTRAL TIME: 12:17 PM CST

	Left		Right		Forward	
	Oxidizer	Fuel	Oxidizer	Fuel	Oxidizer	Fuel
PFS %	69.6	69.8	68.4	67.6	48.2	45.4
Interconnect Usage	4.120		3.991			

ORBIT

1. Left OMS GN2 Accumulator pressure is holding.
2. Left OMS propellant tanks were manually repressurized at 027/16:04:25 GMT using the B regulators.

Data Review

1. OMS and RCS system data has been reviewed up through 028/16:00 GMT. System performance continues as expected with no anomalies noted.
2. All vernier jet firings through 028/15:39:00.000 GMT have been reviewed. There have been no anomalous pulses.

RCS PRESSURIZATION LEG FRCS: B LRCS: B RRCS: B

AFT RCS INTERCONNECT CONFIGURATION: RCS Straight Feed.

23 of 38 primary thrusters have been fired. No new primary thrusters have been fired since the previous report:

F1F		L1A	X	R1A	X
F2F		L3A	X	R3A	X
F3F		L1L		R1R	
F1L		L2L		R2R	
F3L	X	L3L	X	R3R	X
F2R		L4L		R4R	
F4R	X	L1U	X	R1U	X
F1D	X	L2U		R2U	
F2D	X	L4U		R4U	
F3D	X	L2D	X	R2D	X
F4D	X	L3D	X	R3D	X
F1U	X	L4D	X	R4D	X
F2U	X				
F3U	X				

**MER FLIGHT CREW EQUIPMENT- GFE/CFE
STS-107 SHIFT REPORT**

TO: MER MANAGER

SUBJECT: FD13; 2nd SHIFT REPORT

GMT: 028:17:00

EVENTS:

Monitoring RED Team activities and experiments. MEIDEX experiment was conducted by Ilan Ramon during this shift with FCE console concerns.

FORWARD ACTIONS:

Monitor CHITs for activity.

CHITS (Monitoring / Working / Waiting for Closure):

STS0014 INFO ONLY – Spacehab WSA Cleanup IFM - CLOSED

Submitted FCE concurrence with vacuum cleaner steps defined in CHIT STS0014. This work may be accomplished on Flight Day 15.

STS0013 PGSC Power Supply Temperature Check CHIT (was TS0016) - CLOSED

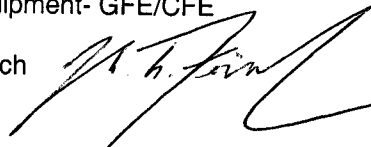
A request was submitted by Dave Stephenson to create another CHIT with better rationale to cover the PGSC Power Supply Temperature Check. This new rationale did not support the opening of a new CHIT and the MER manager instructed Dave Stephenson that he must have CB (Crew office) support before another CHIT, to conduct this activity could be submitted. We are currently waiting Dave reply. FCE console is standing down on this issue until further notice.

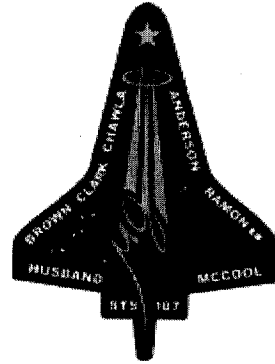
HARDWARE STATUS:

There have been no FCE anomalies recorded this reporting period. It is assumed all FCE is performing nominally.

Flight Crew Equipment- GFE/CFE

Michael G. Kovich

 01/28/03



DPS PASS FSW, MEDS & H/W MER Shift Report

STS-107

Date: 1/28/2003

GMT: 000/28:17:00

Shift: 1st

SYSTEM STATUS / ISSUES BEING WORKED

- All DPS systems performing nominally.

DPS Team Lead: Tom Swartley

Signature: Tom Swartley

STS-107 ESD SYSTEMS SHIFT REPORT
DAY 13 SHIFT 1
GMT 028/17:00

Energy Division Subsystems (MPS, RCS, OMS, FC/PRSD, APU, and Hydraulics) continue to function satisfactorily with the following notes or exceptions:

FC/PRSD – The seventh on-orbit fuel cell purge was performed at 027:17:48 GMT (11/02:09 MET). During the 39-hour purge interval the approximate performance decay was 0.08 Vdc in fuel cell 1, 0.20 Vdc in fuel cell 2, and 0.18 Vdc in fuel cell 3.

The fuel cell 1 & 3 alternate water line temperatures continue to be erratic, indicating slight leakage of warm fuel cell water through the check valves.

EPDC – The only problem being worked by EPDC is the intermittent “sluggish” AC2 phase B current response. The plots for the last 24 hours indicate that there were multiple, intermittent occurrences of sluggish response on AC2 by phase B.

Walter Scott
ESD Team Lead



STS-107 MER TCS Thermal 1st Shift Report

January 28, 2003 11:00AM, 028/17:00 GMT (12/01:21 MET)

All thermal systems are performing nominally and all subsystem temperatures are within acceptable limits. The current attitude (-ZLV -XVV) will be changed at 12/02:00 MET to -ZLV +YVV to help with the MLG tire EOM thermal conditioning.

Shannon Belknap / Dave Norman / Sam Thomas

AVIONICS
FLIGHT CONTROL / GNC DAILY REPORT

01/28/03

STS-107
Daily Report
Flight Day 13

Flight controls and GNC systems are performing nominally.

Rich Kagawa

STS-107
MER Comm and Track Shift Report
GMT 28:14:00
Shift 1

All comm and track systems are operating nominally.

Billy Cowan

MER Comm & Track

STS-107 (OV-102, FLT 28)
1/28/03
8:00 AM
On-Orbit Shift Report

The HYD/WSB Systems are operating normally and all parameters are within their expected ranges. There have been no additional circulation pump runs for thermal conditioning or bootstrap re-pressurization. The HYD/WSB group is not working any issues at this time.

Total Circ Pump Runs

Thermal	Accumulator Recharges
Sys 1: 1 for elevon park	0
Sys 2: 0 runs	0
Sys 3: 0 runs	0

Charles A. Rittrivi

HYD/WSB SSE

MER Shift Reports

STS-107

Day 13 Shift 2

ORBITER ECLSS

STS-107 ECLSS SHIFT REPORT

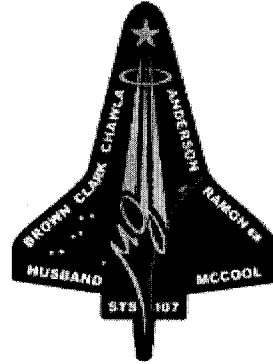
FLIGHT DAY 14

SHIFT 2

All ECLSS systems performing nominally.

Consumables:	Supply water	542.0 lb.
	Waste water	46.7 lb.
	Orbiter Nitrogen	155.3 lb.

Shift Leader
GMT 029/01:18



DPS PASS FSW, MEDS & H/W MER Shift Report

STS-107

Date: 1/28/2003

GMT: 029/01:00:00

Shift: 2nd

SYSTEM STATUS / ISSUES BEING WORKED

- All DPS systems performing nominally.

DPS Team Lead: Christian Garcia

Signature:

A handwritten signature in black ink, appearing to read "Chris Garcia", is written over the "Signature:" label.

STS-107 ESD SYSTEMS SHIFT REPORT
DAY 13 SHIFT 2
GMT 029/00:00

Energy Division Subsystems (MPS, RCS, OMS, FC/PRSD, APU, and Hydraulics) continue to function satisfactorily with the following notes or exceptions:

OMS/RCS

1. Left OMS GN2 Accumulator pressure is holding.
2. Left OMS propellant tanks were manually repressurized at 027/16:04:25 GMT using the B regulators.
3. OMS and RCS system data has been reviewed up through 028/16:00 GMT. System performance continues as expected with no anomalies noted.
4. All vernier jet firing through 028/15:39:00.000 GMT have been reviewed. There have been no anomalous pulses.
5. 23 of 38 primary thrusters have been fired. No new primary thrusters have been fired since the previous report.

EPDC - The only problem being worked by EPDC is the intermittent "sluggish" AC2 phase B current response. The plots for the last 24 hours indicate that there were several additional occurrences of sluggish response on AC2 by phase B.

All monitored voltage and current measurements were nominal. The 24 hour plots and the strip chart recorder data was reviewed with no unusual signatures noted.

Tom Davies
ESD Team Lead

Thermal

STS-107 MER Thermal 2nd Shift Report

029/01:00 GMT, 19:00 CST 01/28/2003

All thermal systems are performing nominally and all temperatures are within acceptable limits.

The shuttle is currently in a top to earth, starboard wing on the velocity vector attitude. We are currently working on the end of mission extension day thermal analysis. One and two day extensions are being analyzed. EECOM has expressed a concern with the warm cabin air temperatures when in the standard extension day attitudes. We are analyzing alternative attitudes to solve this problem.

Bill Andrews/John Tran

**MER FLIGHT CREW EQUIPMENT- GFE/CFE
STS-107 SHIFT REPORT**

TO: MER MANAGER

SUBJECT: FD13; 3rd SHIFT REPORT

GMT: 029:1:00

EVENTS:

Monitoring BLUE Team activities and experiments.

FORWARD ACTIONS:

Monitor CHITs for activity.

CHITS (Monitoring / Working / Waiting for Closure):

STS0014 INFO ONLY – Spacehab WSA Cleanup IFM - CLOSED

Submitted FCE concurrence with vacuum cleaner steps defined in CHIT STS0014. This work may be accomplished on Flight Day 15.

STS0013 PGSC Power Supply Temperature Check CHIT (was TS0016) - CLOSED

A request was submitted by Dave Stephenson to create another CHIT with better rationale to cover the PGSC Power Supply Temperature Check. This new rationale did not support the opening of a new CHIT and the MER manager instructed Dave Stephenson that he must have CB (Crew office) support before another CHIT, to conduct this activity could be submitted. We are currently waiting Dave reply. FCE console is standing down on this issue until further notice.

HARDWARE STATUS:

There have been no FCE anomalies recorded this reporting period. It is assumed all FCE is performing nominally.

Flight Crew Equipment- GFE/CFE

Derek Neumeyer



MER Shuttle Safety Console
STS-107 FD 13 Shift 2
GMT 029:00:30

The MER Safety Console is not working any safety of flight issues.

Brandon Dick

STS-107

OMS/RCS Day 13 Shift 2 Report

INITIATOR: Garza
DATE: January 28, 2003

MET: 12/02:38
GMT: 028/18:17
CENTRAL TIME: 12:17 PM CST

	Left		Right		Forward	
	Oxidizer	Fuel	Oxidizer	Fuel	Oxidizer	Fuel
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ORBIT

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F1F		L1A	X	R1A	X
F2F		L3A	X	R3A	X
F3F		L1L		R1R	
F1L		L2L		R2R	
F3L	X	L3L	X	R3R	X
F2R		L4L		R4R	
F4R	X	L1U	X	R1U	X
F1D	X	L2U		R2U	
F2D	X	L4U		R4U	
F3D	X	L2D	X	R2D	X
F4D	X	L3D	X	R3D	X
F1U	X	L4D	X	R4D	X
F2U	X				
F3U	X				

MER Shift Reports

STS-107

Day 13 Shift 3

ORBITER ECLSS

STS-107 ECLSS SHIFT REPORT

FLIGHT DAY 14

SHIFT 3

All ECLSS systems performing nominally.

Consumables:	Supply water	554.3 lb.
	Waste water	57.5 lb.
	Orbiter Nitrogen	156.5 lb.

Shift Leader
GMT 029/09:30

**MER FLIGHT CREW EQUIPMENT- GFE/CFE
STS-107 SHIFT REPORT**

TO: MER MANAGER

SUBJECT: FD14; 1st SHIFT REPORT

GMT: 029:09:00

EVENTS:

Monitoring RED Team activities and experiments.

FORWARD ACTIONS:

Monitor CHITs for activity.

CHITS (Monitoring / Working / Waiting for Closure):

STS0014 INFO ONLY – Spacehab WSA Cleanup IFM - CLOSED

Submitted FCE concurrence with vacuum cleaner steps defined in CHIT STS0014. This work may be accomplished on Flight Day 15.

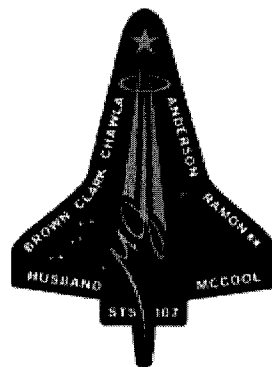
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HARDWARE STATUS:

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Kevin M. Rullman
Flight Crew Equipment- GFE/CFE



DPS PASS FSW, MEDS & H/W MER Shift Report

STS-107

Date: 1/29/2003

GMT: 029/09:00:00

Shift: 3rd

SYSTEM STATUS / ISSUES BEING WORKED

All DPS systems performing nominally.

DPS Team Lead: Franzel Tongol

Signature:

A handwritten signature in black ink, consisting of a series of loops and flourishes, written over a horizontal line.



Thermal 3rd Shift Report

STS-107, January 29, 2003
3 AM, MET 012/17:21 (29/09:00 GMT)

All temperatures are within acceptable limits and all thermal systems are operating nominally.

Diana Coronado

STS-107 ESD SYSTEMS SHIFT REPORT
DAY 13 SHIFT 3
GMT 029/09:00

Energy Division Subsystems (MPS, RCS, OMS, FC/PRSD, APU, and Hydraulics)
continue to function satisfactorily with the following notes or exceptions:

Chuck Beatty
ESD Team Lead

MER Shuttle Safety Console
STS-107 FD 13 Shift 3
GMT 029:08:20

The MER Safety Console is not working any safety of flight issues.

David Melendez